



COUNTY BOROUGH OF READING.

ANNUAL REPORT

OF THE

Medical Officer of Health

For the Year 1920.

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OLD COLLEGE BUILDINGS,
ST. LAURENCE'S CHURCHYARD,
READING.

May, 1921.

TO THE MAYOR, ALDERMEN AND COUNCILLORS
OF THE COUNTY BOROUGH OF READING.

I beg to submit the Annual Report on the Health and Sanitary circumstances of the Borough for the year 1920.

No report of this nature would be complete without reference to my predecessor in the office of Medical Officer of Health, Dr. Ashby.

Appointed in the year 1887, Dr. Ashby was Medical Officer of Health for a period of 33 years, a period which a perusal of this Report will shew witnessed enormous strides in the public health of the district. In June, 1920, he was appointed Consulting Medical Officer, while still retaining the office of Public Analyst.

The year under review shews an improvement even on the highly satisfactory health returns of previous years. The death rate from all causes, the infant mortality rate, and the tuberculosis death rate, by which three criteria the health of a district is commonly judged, are all the lowest of which we have a record, whilst in all three respects Reading compares very favourably with other large centres of population.

The least satisfactory feature of the Report will be found in the section on Housing. The housing shortage continues, and considerable numbers of the population are still compelled to live under conditions which are far from desirable.

I cannot conclude without expressing my indebtedness to the members of the Authority for the courtesy and consideration shewn me since taking up my appointment, and to every individual member of the staff of the Health Department for the loyalty and assistance they have given me in carrying out the duties.

I am,
Your obedient servant,
H. J. MILLIGAN,
Medical Officer of Health.

HEALTH COMMITTEE.

HIS WORSHIP THE MAYOR (Denys Egginton, Esq., J.P.).

Aldermen.

GEORGE STEWART ABRAM, B.A., M.B., J.P. (Chairman).	FREDERICK ALFRED COX. EDWARD JACKSON, J.P.
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Councillors.

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MATERNITY AND CHILD WELFARE COMMITTEE.

HIS WORSHIP THE MAYOR (Denys Egginton, Esq., J.P.).

Aldermen.

GEORGE STEWART ABRAM, B.A., M.B., J.P.	EDWARD JACKSON, J.P.
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Councillors.

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Non-Members of the Council.

MR. H. C. ROBERTS. MRS. A. DAVIS. MRS. M. A. JONES.	MISS M. MAPLESDEN. MRS. K. SHORTER. MRS. M. L. STANSFIELD.
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STAFF.

Medical Officer of Health.

H. J. MILLIGAN, M.C., M.D., D.P.H.,
of Gray's Inn, Barrister-at-Law.
(appointed June, 1920).

Consulting Medical Officer and Public Analyst.

ALFRED ASHBY, M.B., F.R.C.S., F.I.C.,
(Medical Officer of Health till June, 1920).

Tuberculosis Officer.

H. R. MINKLEY, M.R.C.S., L.R.C.P.,
(appointed April, 1920).

Medical Officers (part time) Maternity and Child Welfare.

SIDNEY GILFORD, M.B., Ch.B.
AGNES BERNFELD, L.S.A., D.P.H.

Visiting Medical Officer, Park Hospital (part time).

E. W. ROWLAND, B.A., M.R.C.S., L.R.C.P.

Chief Inspector of Nuisances.

JAMES DODD.

Assistant Inspectors of Nuisances.

E. H. GRAY.
P. B. BROCK.
R. A. REEVES.
W. E. BOND.

Senior Lady Health Visitor and Inspector of Midwives.

MISS SARAH DUTTON.

Lady Health Visitors.

MISS M. P. GREEN.
MISS E. A. BODDON.
MISS E. F. WHEELER.
MISS G. WHITE.

Tuberculosis Nurses.

MISS M. B. WARD.
MISS D. WATSON.

Matron Park Hospital.

MISS SARAH MELVIN.

Matron Dellwood Maternity Home.

MISS GERTRUDE L. BURNETT.

STATISTICAL SUMMARY, 1920.

Population (1920), Registrar General's Estimate	...	...	...	...	...	...	For Birth rate, 95,387 For Death rate, 95,006
Population (Census 1911)	...	...	...	...	...	...	87,693
Number of births registered	...	...	...	...	...	...	2,286
Nett birth rate (per 1000 of the population)	...	...	...	...	...	...	23.8
Average birth rate, preceding ten years	...	...	...	...	...	...	19.6
Number of deaths registered	...	...	...	...	...	...	1,062
Nett death rate (per 1000 of the population)	...	...	...	...	...	...	10.7
Average death rate, preceding ten years	...	...	...	...	...	...	12.66
Number of infant deaths	...	...	...	...	...	...	152
Infant mortality rate (per 1000 births)	...	...	...	...	...	...	66.7
Average infant mortality rate, preceding ten years	...	...	...	...	...	...	83.3
Tuberculosis death rate (per 1000 of the population)	...	...	...	...	...	...	{ All forms 0.96 Pulmonary 0.79
Average Tuberculosis death rate, preceding ten years	...	...	...	...	...	...	{ All forms, 1.32 Pulmonary 1.08
Number of houses in the borough (approximate)	...	...	...	...	...	...	21,000
Area of borough in acres	...	...	...	...	...	...	9,106
Nett proceeds of a penny rate	...	...	...	...	...	...	£1,890

NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

Population. The population of the borough at the Census of 1911 was 87,693. The Registrar General's estimate of the population in the year 1920 is, for the birth rate and marriage rate, 95,387, and for the death rate (civilian) 95,006. The practice of distinguishing civilian and total populations became necessary during the war owing to the absence on military service of a large proportion of the adult males, and to the impossibility of assigning deaths on service to their proper areas. With the return to more normal conditions, the two estimates now nearly coincide.

The Registrar General's method of estimating populations is to assume that the rate of increase of the population in the years following a census will be the same as during the preceding intercensal period.

This obviously can never give a perfectly reliable statement of the population, and estimates are known to be less trustworthy the more remote they are from the last census.

The intervention of the war since the last enumeration makes post war calculations even more difficult than before. Abnormal fluctuations in both birth rate and death rate have taken place, whilst changes in the industrial distribution of the population and the exceptional housing situation also have considerable effect. Until the returns of the census now being taken are available, all vital statistics based on provisional estimates will be open to a certain amount of criticism.

Physical Features and General Character of the District. The borough has an area of 9,106 statute acres, and lies in the valleys of the Thames and its tributary, the Kennet. Caversham, incorporated with the borough in 1911, lies north of the Thames, whilst the original Borough of Reading, together with Tilehurst, which was also incorporated in 1911, lies south of that river. The Thames, flowing from west to east through the borough, divides it as indicated, whilst the Kennet flows in a general north-easterly direction through the southern portion. On the banks of the latter river the ancient town of Reading stood. The ground from the lowest point, 120 feet above ordnance datum at the junction of the Thames and Kennet, slopes upwards on both sides of the Thames to a height of over 300 feet. The main part of the Borough is built on gravel overlying chalk, but in certain parts Reading beds, and at Tilehurst, London clay, is present.

Rainfall. The total rainfall for the year 1920 as registered at the Forbury Gardens was 25.70 inches, compared with 29.54 inches in 1919. The wettest month of the year was July, with a fall of 5.28 inches, the driest February, with .39 inches. Rain fell to the extent of .01 inches or more on 176 days during the year.

Social Conditions and Occupations of the People. The town is chiefly industrial, but has a considerable proportion of the residential and professional classes. At the last census, the largest single group of occupied persons was those engaged in food production, principally biscuit manufacturing.

Other important industries are metal workers and engineering, transport workers, including railwaymen, seed growing and distribution, printing and lithographing, etc. The conditions of employment are thus varied and have no special determining influence on the health of the inhabitants.

VITAL STATISTICS.

When calculating birth rates and death rates for the borough, regard must be had to deaths of residents of Reading occurring elsewhere, and of children born outside the borough to persons normally resident in Reading. Similarly, deductions are made of deaths of non-residents occurring for example in institutions in the borough and of the births of children whose parents are not normally resident in Reading. The rates given are the nett rates after the necessary corrections have been made, and apply to the civilian population only.

Birth Rate. The total number of births registered in the borough during the year was 2286. After correction for inward and outward transfers the nett number of births attributable to Reading is 2278, representing a birth rate of 23.8 per 1000 of the population. Of this number 114 or 4.9 per cent were illegitimate.

The birth rate for the year is the highest recorded since 1905. There has been a progressive decline in the birth rate of the borough since the year 1874, the earliest year for which records are available. In that year the rate was 37.5 per 1000 of the population. The extent of the decline will be seen in the decennial averages from 1874 to 1913 and the subsequent years, which is set out in the table below.

The whole question of the decline in the birth rate which is common to the whole country and most European countries, is a matter for very serious consideration.

Marriage Rate. Mr. W. H. Oliver, the Superintendent Registrar of Births, Deaths, etc., informs me that 1928 persons were married during the year. This gives a marriage rate of 20.2 per 1000 of the population.

Death Rate. The total number of deaths registered as having occurred in Reading during 1920 was 1062. Of these, 109 were persons not normally resident in the borough, whilst intimation was received of 63 residents who died elsewhere. The nett number of deaths assigned to Reading is therefore 1016, which gives a death rate of 10.7 per 1000 of the population.

This is the lowest death rate recorded in Reading.

Without overlooking the significance of the continued fall in the birth rate it should be remembered that almost as great a proportionate fall is

occurring in the death rate. The loss of potential lives occasioned by the former is nearly offset by the saving in lives caused by the improved conditions and the higher level of education of the people and reflected in the steadily falling death rate. Table I shews the fall in the death rate from 1874 onwards.

To convey more clearly what this fall in the death rate means it may be stated that had the death rate during 1920 been the same as that for the ten years 1874-1883, not 1016 but 1719 persons would have died. As will be seen this represents a saving of over 700 lives during the year.

Infant Mortality. Not the least gratifying feature of the statistics of 1920 is the continued fall in the already very low rate of infant mortality. By rate of infant mortality is meant the proportion of deaths of infants under one year to the number of births during the same period. During the year there occurred the deaths of 152 infants under one year. Calculated on the number of births this represents an infant mortality rate of 66.7 per 1000 births registered. This also constituted a low record in the history of Reading.

Further consideration will be given to the subject of infant mortality in the section of the report dealing with Maternity and Child Welfare.

Table I following summarizes the principal statistics since 1874. The records have been obtained from the reports of the Medical Officer of Health, the earliest of which dates from that year.

The years subsequent to 1913 will indicate some of the effects of the war, and that war's casualties are not confined to the battlefield.

TABLE I.

Period.	Birth rate.	Death rate.	Infant Mortality.	Death rate from Pulmonary Tuberculosis.
1874-83 (average)	36.5	18.1	131.6	1.99
1884-93 do.	32.0	16.5	127.9	1.47
1894-1903 do.	27.1	14.1	133.7	1.13
1904-13 do.	22.7	12.1	99.2	1.01
1914	20.1	12.0	88.5	1.09
1915	19.8	13.8	82.0	1.13
1916	19.3	14.4	80.8	1.05
1917	15.4	14.2	98.6	1.41
1918	17.1	15.9	72.7	1.40
1919	16.7	11.9	68.4	0.89
1920	23.8	10.6	66.7	0.79

The following Table (Table II, pages 10, 11) shews the principal causes of deaths with the ages at which they occurred and allocated to the various municipal wards. The classification is that of the Manual of the International List of Causes of Death.

TABLE II

CAUSES OF, AND AGES, AT DEATH, 1920.

CAUSES OF DEATH.					All Ages.	Under 1 yr.	1—2 yrs.	2—5 yrs.	5—15 yrs.	15—25 yrs.	25—45 yrs.
ALL CAUSES.					1006	144	18	24	28	45	140
Certified					10	8	—	—	1	—	—
Uncertified					—	—	—	—	—	—	—
1	Enteric Fever	...	...	...	—	—	—	—	—	—	—
2	Small Pox	...	...	...	—	—	—	—	—	—	—
3	Measles	...	...	...	11	3	6	—	2	—	—
4	Scarlet Fever	...	...	...	—	—	—	—	—	—	—
5	Whooping Cough	...	...	...	8	1	3	3	1	—	—
6	Diphtheria and Croup	...	...	...	8	—	—	4	2	—	1
7	Influenza	...	...	...	22	2	—	2	—	—	4
8	Erysipelas	...	...	...	1	—	—	—	—	—	—
9	Phthisis (Pulmonary Tuberculosis)	...	...	...	75	—	—	—	3	18	40
10	Tuberculous Meningitis	...	...	...	7	—	—	—	3	2	2
11	Other Tuberculous Diseases	...	...	...	9	1	—	—	2	3	2
12	Cancer (Malignant Diseases)	...	...	...	113	1	—	—	—	—	13
13	Rheumatic Fever	...	...	...	3	—	—	—	1	1	1
14	Meningitis	...	...	...	5	3	1	—	—	—	—
15	Organic Heart Disease	...	...	...	104	2	—	—	2	3	9
16	Bronchitis	...	...	...	57	5	3	—	—	—	1
17	Pneumonia (all forms)	...	...	...	57	18	1	4	1	2	10
18	Other Diseases of Respiratory Organs	...	...	...	21	—	—	2	3	—	1
19	Diarrhoea and Enteritis	...	...	...	15	14	1	—	—	—	—
20	Appendicitis and Typhlitis	...	...	...	6	—	—	—	—	1	2
21	Cirrhosis of Liver	...	...	...	3	—	—	—	—	—	—
21a	Alcoholism	...	...	...	—	—	—	—	—	—	—
22	Nephritis and Bright's Disease	...	...	...	28	1	1	—	2	1	4
23	Puerperal Fever	...	...	...	4	—	—	—	—	1	3
24	Other Accidents and Diseases of Pregnancy	...	...	...	7	—	—	—	—	—	7
25	Congenital Debility and Malforma- tion (including premature birth	...	...	...	84	84	—	—	—	—	—
26	Violent deaths (excluding suicide)	...	...	...	19	—	—	3	3	1	1
27	Suicide	...	...	...	5	—	—	—	—	—	1
28	Other defined diseases	...	...	...	337	16	1	5	4	12	37
29	Diseases ill-defined or unknown	...	...	...	7	1	1	1	—	—	1
Totals					1016	152	18	24	29	45	140
Sub-headings included in above :—											
	Cerebro-spinal fever	...	...	...	—	—	—	—	—	—	—
	Poliomyelitis	...	...	...	—	—	—	—	—	—	—
	Broncho-pneumonia	...	...	...	33	13	3	4	1	1	2
	Venereal Disease	...	...	...	1	1	—	—	—	—	—
	Cerebral heomorrhage	...	...	...	39	1	—	—	1	—	—
	Arterio Sclerosis	...	...	...	37	—	—	—	—	—	1
	Senile Decay	...	...	...	69	—	—	—	—	—	—
	Tetanus	...	...	...	—	—	—	—	—	—	—
	General Paralysis of Insane	...	...	...	1	—	—	—	—	—	—
	Aneurism	...	...	...	4	—	—	—	—	—	—
	Locomotor Ataxy	...	...	...	1	—	—	—	—	—	—
	Encephalitis Lethargica	...	...	...	2	—	—	—	—	—	—
					187	15	3	4	2	1	3

ALLOCATED TO MUNICIPAL WARDS.														DEATHS IN INSTITUTIONS.	
65 yrs. and up- wards	Abbey	Battle	Castle	Caversham	Church	East	Katesgrove	Minster	Redlands	Tilehurst	Victoria	West	Residents of Borough	Non-Resi- dents of Borough	
22	385	28	130	62	76	116	119	92	47	76	58	64	138	—	—
1	—	—	1	1	—	1	—	—	1	—	3	3	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	2	1	—	4	—	2	1	—	1	—	1	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	1	2	—	1	1	—	1	—	1	—	1	—	—	—
1	—	—	—	—	—	—	—	1	1	—	—	—	6	—	2
7	7	1	2	3	2	2	5	1	2	—	—	1	3	1	—
1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
13	1	—	12	7	5	11	6	6	5	4	6	2	11	10	6
—	—	—	1	1	—	2	1	—	—	1	—	—	1	5	2
1	—	—	2	—	3	2	1	—	—	—	—	—	1	2	2
51	48	2	17	6	7	15	10	11	6	10	9	6	14	24	23
—	—	—	—	—	—	1	—	—	—	1	—	1	—	1	—
1	—	—	—	—	1	—	1	1	1	1	—	—	—	—	2
28	60	3	10	5	10	14	16	8	8	5	6	5	14	15	2
6	42	—	2	6	8	6	8	7	1	6	5	2	6	4	—
3	8	1	9	5	4	3	6	14	1	5	2	4	3	13	1
9	6	1	3	—	1	4	4	2	1	1	—	1	3	3	2
—	—	1	3	3	—	3	1	1	—	—	1	—	2	—	2
2	1	1	1	—	—	1	1	—	—	—	—	1	1	3	8
3	—	—	1	—	1	—	1	—	—	—	—	—	—	—	—
9	10	1	7	—	1	5	2	—	1	3	1	4	3	8	5
—	—	—	2	—	—	—	—	2	—	—	—	—	—	4	3
—	—	—	—	1	2	—	1	1	1	1	—	—	—	4	—
—	—	3	14	4	1	9	10	11	3	2	9	8	10	2	2
7	4	1	—	—	2	—	3	4	2	1	—	2	4	5	3
2	2	—	—	1	1	—	1	—	—	1	—	—	1	—	1
7	195	12	42	19	24	38	37	21	11	30	22	26	55	73	37
2	1	—	—	—	1	—	—	—	2	2	—	2	—	—	—
3	385	28	131	63	76	117	119	92	48	76	61	67	138	179	103
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	5	1	5	1	2	—	3	12	—	1	—	4	4	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	29	1	10	3	6	2	5	—	—	4	1	3	4	—	—
2	34	1	1	1	1	4	1	3	2	4	2	4	13	—	—
1	68	3	9	7	8	4	3	4	4	3	9	8	7	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
3	1	—	1	—	—	1	1	—	1	—	—	—	—	—	—
1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
1	1	—	—	—	2	—	—	—	—	—	—	—	—	—	—
1	138	6	27	12	20	11	13	19	7	12	12	20	28	—	—

Cancer. It will be seen from the table that cancer (malignant disease) now takes place as being the most fatal single disease. This is subject to certain qualifications when comparing its incidence with that of earlier years. With the fall in the number of deaths from certain other diseases, *e.g.*, tuberculosis, cancer will shew a certain *relative* increase. With the increased expectation of life, the result of improved sanitation, more persons now reach the higher ages at which cancer is most common. With the increase of medical knowledge the diagnosis of cancer is now more accurate and deaths which in earlier years were ascribed to other diseases are now truly assigned to cancer. Even when all these factors have been considered it appears to be a fact that cancerous diseases shew a *real* increase.

Respiratory Diseases. Pneumonia, bronchitis and other respiratory diseases are still a very important cause of death, though the year under review shews a very great improvement on the previous year when influenza was still rampant.

Organic Heart Disease. This is a constant and important contributor to the death returns of all areas. When it is remembered that rheumatism, including the milder forms, is a principal cause of heart disease, it appears that much of this disease and suffering is preventible.

Deaths from Violence. Twenty-three persons in the borough died during the year from violence, of whom five committed suicide.

The following comparative analysis of mortality, etc., in Reading and in other towns throughout the country as well as the country as a whole, will shew that with the single exception of the birth rate Reading compares very favourably, not only with other large towns, but with the smaller towns and the country generally.

TABLE III.

BIRTH RATE, DEATH RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR 1920.

(Provisional figures. Provisional populations estimated to the middle of 1920 have been used for the purposes of the table. The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns).

	Birth-rate per 1,000 total population	Annual Death-rate per 1,000 Population									Rate per 1,000 births		Percentage of total deaths.			
		All causes	Enteric fever	Small-pox	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Violence	Diarrhoea & Enteritis (under 2 yrs)	Total deaths under 1 year	Deaths in Public Institutions	Certified casues of death	Inquest cases	Uncertified causes of death
England and Wales	25.4	12.4	0.01	0.60	0.19	0.04	0.11	0.15	0.28	0.48	8.3	80	24.3	92.2	6.6	1.2
96 Great Towns, including London (Census populations exceeding 50,000).	26.2	12.5	0.01	0.00	0.22	0.04	0.14	0.16	0.31	0.43	10.4	85	31.3	92.2	7.1	0.7
148 smaller Towns (Census popula- tions 20,000—50,000... ..	24.9	11.3	0.02	0.00	0.19	0.03	0.10	0.14	0.27	0.38	7.8	80	16.5	93.2	5.3	1.5
London	26.5	12.4	0.01	0.00	0.22	0.05	0.17	0.22	0.30	0.47	9.5	75	46.8	91.2	8.6	0.2
READING	23.81	10.7	0.00	0.00	0.11	0.00	0.08	0.08	0.23	0.24	6.5	66	27.8	94.98	4.04	.98

Amount of Poor Law Relief. I am indebted to Mr. Oliver, Clerk to the Guardians, for the following information. The amounts expended during the year 1920 and the form in which the relief was afforded were (a) outdoor relief £14, 372, (b) indoor relief £5,199 (approximate), (c) medical relief £467.

Hospitals and Other Forms of Gratuitous Medical Relief. Not including institutions provided by the Local Sanitary Authority and which are described elsewhere in this report, the two principal institutions in the borough are the Royal Berkshire Hospital and Battle Infirmary, the property of the Board of Guardians.

(a) **THE ROYAL BERKSHIRE HOSPITAL.** Mr. Herman Burney, Secretary to the hospital, has kindly supplied me with the following information:—

Beds available.				male.		female.
Surgical	...	...	...	39	...	54
Medical	...	...	...	28	...	30
Children	...	...	...	...	20	...
Ophthalmic	...	...	...	...	16	...
Venereal Diseases	...	...	...	...	12	...
Ear, nose and throat	...	...	...	...	8	...
Isolation	...	...	...	...	6	...
						Total 213

The average number of beds in constant occupation during the year 1920 was 187, and the average number of patients awaiting admission was about 100. The number of in-patients admitted during the year was 2476, of which number 1129 came from Reading.

(b) **BATTLE INFIRMARY.** This institution was a War Hospital until the end of the year, when it reverted to the Guardians.

On the 1st January, 1921, there were 80 beds there at the disposal of the Guardians, all of which were occupied.

Alterations were then in progress, which will considerably increase the number of beds available.

SANITARY CIRCUMSTANCES OF THE DISTRICT.

Water. The source of the water supply of the borough is the river Kennet, and the possibilities of contamination are those common to all river supplies. The river is under careful supervision, and every precaution is taken to guard against its pollution.

The Waterworks Department is under the direction of Mr. Walker, the Water Engineer, to whom I am indebted for the following information:—

The water is subjected to a process of pre-filtration to remove grosser impurities before being passed through mechanical filters. It is, in addition, chlorinated by the use of a solution of bleaching powder which is added in

the proportion of 1 part per 1,000,000 parts of water. The result is a water which by chemical and bacteriological examinations is shewn to be of the highest degree of purity, and without any trace of the presence of chlorine to the taste.

Bacteriological examination shews constantly the absence of the bacillus coli in 100 cubic centimetres of water.

The distribution of the water is made from service reservoirs having a capacity of about 10,000,000 gallons, and a constant supply is maintained.

Tilehurst, added to the borough in 1911, is supplied by the Tilehurst, Pangbourne and District Waterworks Company, Ltd., the source being a deep well in the chalk. This supply is also constant and wholesome.

A certain number of houses in the outlying parts of the Borough are still dependent on wells for their supply, not all of which are satisfactory. With the extension of the mains these are decreasing year by year.

The amounts of water supplied by the Corporation Waterworks is approximately 30 gallons per head per day for all purposes—20 gallons for domestic and 10 for trade and municipal purposes.

Rivers and Streams. The Rivers Thames and Kennet are under the supervision of the Thames Conservancy Board, and no serious pollution occurs in their passage throughout the borough.

Drainage and Sewerage. Practically the whole of the borough is sewered with separate sewers for sewage and surface water. The sewage from the old borough south of the Thames is treated by broad irrigation at the Corporation Manor Farm, the effluent being discharged into the Kennet. The sewage from Caversham, north of the Thames, is treated in septic tanks and percolating filters before its final discharge into the river. The sewers are now being extended to Tilehurst, which will enable the conservancy system obtaining there to be converted into a water carriage system (*vide infra*).

The Corporation has decided upon the "Activated Sludge" system of dealing with sewage in order to obviate certain objections to the broad irrigation method, but operations have not yet commenced.

Closet Accommodation. With the exception of a few in the outlying parts of the borough, principally in Tilehurst, houses are supplied with closets on the water carriage system. The approximate numbers and types of closets in use at the end of the year were 26,015 water closets, 563 pail closets and 23 middens. The extension of the sewers to Tilehurst has permitted during the year the conversion of 110 pail closets into water closets.

The work of emptying pail closets and cesspools is done by the householders and is carried out without nuisance.

Scavenging. The scavenging of the town is carried on under the direction of the Borough Surveyor. The streets are maintained at a high level of cleanliness, and watering of all streets is undertaken whenever the conditions indicate any necessity.

House refuse is collected twice weekly free of charge, a small charge being made for the removal of trade refuse.

There are at present very few houses with fixed refuse receptacles. In 1914 it was proposed to introduce a clause in an Omnibus Bill making it compulsory for every householder to provide a dust bin with properly fitting cover, but the clause was defeated by a large majority in a poll of the ratepayers, and the provision of suitable covered receptacles for refuse is not uniform.

The Health Committee has recently recommended that the carts in which the refuse is collected should be provided with covers.

All refuse collected is deposited at tips where it is carefully covered over with layers of earth. Butchers' and fishmongers' offal is burned.

Sanitary Inspection of the District. In the following Table, from information supplied by Mr. J. Dodd, Chief Inspector of Nuisances, are shewn the number and nature of inspections made during the year and the action taken to remedy nuisances when found :—

TABLE IV.

Total number of visits to premises	...	...	...	...	...	...	13,385
Number of complaints received and investigated	...	...	...	...	...	...	551
Number of verbal notices given	...	...	...	...	...	...	128
Number of written notices served (informal) on occupiers	...	...	...	...	...	...	62
Number of written notices served (informal) on owners	...	...	...	...	...	...	280
Number of written notices served (statutory) on owners	...	...	...	...	...	...	3
Number of prosecutions	...	...	...	...	...	...	1
Number and nature of nuisances :—							
Dirty, damp or dilapidated dwelling houses	...	...	...	...	...	...	88
Overcrowded dwelling houses	...	...	...	...	...	...	1
Using cellar as a sleeping room	...	...	...	...	...	...	3
Absence of proper water supply	...	...	...	...	...	...	8
Defective gutters or downspouts	...	...	...	...	...	...	28
Insanitary or defective scullery sinks and wastepipes	...	...	...	...	...	...	18
Defective drains or gulleys	...	...	...	...	...	...	33
Defective water closets	...	...	...	...	...	...	142
Defective cesspools	...	...	...	...	...	...	2
Yards and acres defective or dirty	...	...	...	...	...	...	16
Accumulation of house refuse	...	...	...	...	...	...	12
Accumulation of manure	...	...	...	...	...	...	8
Animals so kept as to be a nuisance	...	...	...	...	...	...	10
Miscellaneous	...	...	...	...	...	...	27

All except eight of the notices sent in connection with the above nuisances were complied with during the year.

In the eight exceptions the time for compliance had not expired at the end of the year. Forty house drains were tested during the year.

Premises and Occupations which can be Controlled by Byelaws or Regulations :—

(a) COMMON LODGING HOUSES. There are three common lodging houses in use in the borough with registered accommodation for 148 persons, viz., 138 men, 2 married couples and 6 women.

Seventy-one visits were paid to them during the year, and eleven nuisances were found and abated after notice.

No cases of infectious disease occurred in these lodging houses.

Two of the lodging houses are in old property, and not at all suited for the purpose. The worst is an area, which will be represented under Part 2 of the Housing of the Working Classes Act, 1890.

(b) OFFENSIVE TRADES. There are four premises where offensive trades are carried on, viz., one tripe boiler, and three gut scraping. All were regularly inspected and were found to be conducted in conformity with the byelaws regulating such trades. No complaints of nuisance were received in respect of any of them. There is one knacker's yard.

There are no byelaws in force in the borough in respect of houses let in lodgings, nor do they appear to be necessary. There are normally about 12 caravans used as dwellings in the district, but no byelaws have been framed. Complaints have at times been received in respect of certain of them but frequent visits were made during the year, and no nuisance was found to exist.

(c) CANAL BOATS. There are 31 canal boats on the register, one new boat having been added during the year. Thirty-four visits were paid to fifteen boats, and five infringements of regulations were rectified without legal proceedings. No case of infectious disease was found nor was it necessary to detain any boat for cleansing

TABLE IV_A.
FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.
INSPECTION.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices (3)	Prosecutions. (4)
Factories (including Factory Laundries)	150	—	—
Workshops (including workshop Laundries)	394	51	—
Workplaces (other than Outworkers' premises included in Part 3 of this report)	20	3	—
Total	564	54	—

TABLE IVB.
DEFECTS FOUND.

Particulars. (1)	Number of Defects.			Number of Prosecu- tions (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
Nuisances under the Public Health Acts :—				
Want of cleanliness	34	26	—	—
Want of ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances	6	6	—	—
Sanitary accommodation :—				
Insufficient	3	3	—	—
Unsuitable or defective	7	7	—	—
Not separate for sexes	1	1	—	—
Offences under the Factory and Work- shops Acts :—				
Illegal occupation of under-ground bakehouse (s. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses	—	—	—	—
Other offences (excluding offences relating to outwork which are in- cluded in Part 3 of this report). ...	—	—	—	—
Totals	51	43	—	—

TABLE IVc.
HOMEWORK.

Nature :— Wearing apparel (Tailoring, knitting, hosiery, etc.)									
Lists received twice a year from employers	...	...	...	...	...	...	...	...	8
Number of outworkers Contractors	...	...	...	...	...	...	...	...	8
Workmen	...	...	...	...	...	...	...	...	10
Lists received once a year	...	...	...	...	...	...	...	...	24
Number of outworkers Contractors	...	...	...	...	...	...	...	...	24
Workmen	...	...	...	...	...	...	...	...	30
Outwork in unwholesome premises	...	...	...	...	...	...	...	...	10
Notices served	...	...	...	...	...	...	...	...	3
Outwork in infected premises	...	...	...	...	...	...	...	...	0

TABLE IVd.
REGISTERED WORKSHOPS.

Workshops on the Register at the end of the year. (1)	Number (2)
Retail Bakehouses	31
Tailoring	59
Dressmaking and millinery	20
Upholstering	7
Laundries	7
Photography	3
Miscellaneous	118
Total number of workshops on Register	245

TABLE IVe.
OTHER MATTERS.

Class. (1)	Number (2)
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Acts. (s.5, 1901)	3

Rats and Mice Destruction Act, 1919. Work under this Act was carried out under the supervision of officers of the Health Department. Three official rat weeks were held. Proprietors of all places likely to harbour rats were circularized, their obligations under the Act pointed out, and the best means of destroying the vermin indicated. The means most commonly employed were poisons, chiefly barium and phosphorus, and traps. In the last of the three official rat weeks over 450 dead rats were actually picked up. At all other times throughout the year active steps were taken and there is reason to believe considerable destruction was wrought.

THEATRES AND CINEMAS. Nine inspections of five such premises were made during the year and all were found to be satisfactorily conducted.

SCHOOLS. The hygienic conditions of the Council Schools are in the main satisfactory, but certain of the Voluntary Schools are very old and their general condition leaves much to be desired. The Medical Officer of Health is also School Medical Officer. Details of action taken to control infectious disease will be found in the report of the School Medical Officer.

FOOD.

(a) **MILK SUPPLY.** The greater part of the milk consumed in the borough comes from farms in the town or in the immediate vicinity, but a certain proportion is rail-borne from the counties of Wiltshire and Somerset. There appears to be no special scarcity in the district. The defects of quality are those generally known to prevail throughout the country under the present unsatisfactory methods of milk production.

The examination of samples for the presence of the tubercle bacillus was discontinued during the war, and no samples were examined during the year. The practice will be recommenced during the current year. Instances have occurred where cows suffering from tuberculosis of the udder were brought to the public slaughterhouse for slaughter. Inquiry shewed that they had been giving milk practically up till the day of slaughter.

An endeavour is made to maintain the quality of the milk sold by the taking of frequent samples under the Sale of Food and Drugs Acts.

MILK AND CREAM REGULATIONS 1912 AND 1917. All samples taken for the purpose of the Sale of Food and Drugs Acts are examined for the presence of preservatives. The following Table (Table V.) shews the results of these examinations :—

REPORT FOR THE YEAR ENDED 31ST DECEMBER, 1920.

TABLE V.

1. Milk and Cream not sold as preserved cream.

(a) Number of samples examined for the presence of a preservative.		(b) Number in which preservative was reported to be present, and percentage of preservative found in each sample.	
Milk.	222	4	
		Sample	
		No. 107	0.05% boric acid.
		No. 149	0.04% boric acid.
		No. 151	0.04% boric acid.
		No. 153	0.04% boric acid.
Cream	0	0	
2. Cream sold as preserved cream.		No samples taken.	

Sample No. 107 was an informal sample. In the case of Sample No. 153 the bottle containing the remaining third of the sample burst and no proceedings were taken. In the other two cases prosecutions were undertaken, the defendant in each case being fined one pound.

MILK (MOTHERS' AND CHILDREN) ORDER, 1919. A statement of the work done under this order will be found in the section of the report dealing with Maternity and Child Welfare. (See page 41).

(b) MEAT. There are 30 slaughterhouses in the borough, 15 of which are owned by the Corporation and 15 by private traders.

The Corporation Slaughterhouses, 14 of which are let to private traders, are all in one building and the inspection of meat is thereby greatly facilitated. As approximately 75 per cent. of all animals slaughtered in the borough come to the Corporation Abattoirs that proportion can be described as coming under efficient inspection. The private slaughterhouses are regularly inspected and found to be well conducted and to comply with all byelaws. They suffer from the disadvantages common to all private slaughterhouses when considered from the point of view of meat inspection. The following table shews the number of slaughterhouses registered and licensed at the dates indicated :—

	In 1914.	In January, 1920.	In December, 1920.
Registered	16	14	14
Licensed	1	1	1
	—	—	—
Total	17	15	15
	—	—	—

The Inspector, in his report, emphasizes the advantages of the regulation of the Ministry of Food, by which all fourth grade cattle were brought to a

recognized centre for inspection. At present there is a temptation for traders to send doubtful animals to districts where inspection is inefficient or perfunctory.

The subjoined list shews the amount of meat and other articles of foodstuffs seized during the year, tuberculous meat being shewn separately. The amount seized is still in excess of the average owing to the operation of the above-mentioned regulation of the Ministry of Food.

On two separate occasions animals found to have suffered from one of the scheduled contagious diseases (anthrax and swine fever) were found in the slaughterhouse. The cases were reported to the Police who took all necessary precautions.

TABLE VI.

Unsound Food Seized or Surrendered.	For Tuberculosis.	For other causes.-
123 carcasses of beef	69	54
17 parts of carcasses of beef	17	—
3 carcasses of veal	—	3
35 carcasses of pork	20	15
21 carcasses of mutton	—	21
246 heads or internal organs of beasts or sheep	134	112
90 heads or internal organs of pigs	90	—
1589 lbs. of beef	—	1589 lbs.
210 lbs of pork	—	210 lbs.
788½ lbs of bacon (imported)	—	788½ lbs.
1316 lbs of beef (imported)	—	1316 lbs.
11,778 lbs of mutton (imported)	—	11,778 lbs.
494 rabbits (imported)	—	494
39 ox tails (imported)	—	39
32½ lbs of butter (imported)	—	32½ lbs.
1036 eggs (imported)	—	1036
1176 lbs of black currants (imported)	—	1176 lbs.
3073 tins of assorted foodstuffs (imported)	—	3073

(c) OTHER FOODS. There are three sausage factories, all of which, together with butchers' shops, market stalls, ice cream shops, and all other food shops, were regularly inspected. Their condition was found to be generally satisfactory, and minor improvements were effected in 46 instances without resort to official proceedings.

Twenty visits were paid to the kitchens of hotels and restaurants.

Notices to cleanse were served in three instances.

(d) No reports of any cases of food poisoning have been received.

(e) SALE OF FOOD AND DRUGS ACTS. Appended is a statement of the nature and number of samples taken by the Inspector under these Acts, with the results of the examination by the Public Analyst (Dr. Ashby). 111 of the samples were taken informally, the remainder being taken in accordance with the procedure prescribed by the Acts.

TABLE VII.

Article.	No. of Samples taken.	Number found to be genuine.	Not up to standard.
Milk	222	194	28
Margarine	18	17	1
Butter	7	7	—
Coffee	12	10	2
Pepper	6	6	—
Arrowroot	6	6	—
Sugar	1	1	—
Total	272	241	31

In six cases where milk failed to reach the standard prescribed by the Acts, prosecution was undertaken. In only one case, and then only after appeal to the High Court, was a conviction obtained. The defendant was fined forty shillings. In the remaining five cases the magistrates dismissed the charge, although the analyst's report certified deficiencies in milk fat varying between 17.7 and 13.3 per cent. In each the presumption of adulteration was held to be rebutted, the milk being held to be sold as given by the cow. This state of the law cannot be regarded as satisfactory. Milk forms such an important part of the food of infants that the purchaser should have a guarantee that it attains a minimum standard of nutritive value, and the responsibility should rest with the vendor to supply such an article.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASE.

All the commoner infectious diseases have been unduly prevalent during the year. The number of cases of scarlet fever notified has not been exceeded since 1909, whilst the notifications of diphtheria, though slightly lower than last year, are considerably in excess of the average annual number. The following Table shews the numbers, age, incidence and ward distribution of the cases notified.

TABLE VIII.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1920. CLASSIFIED IN AGES AND LOCALITIES.

Notifiable Diseases.	Number of Cases Notified								Total Cases Notified in each Municipal Ward.										Notified Cases Removed to Isolation Hospital			
	At Ages—Years.								Abbey	Battle	Castle	Caversham	Church	East	Katesgrove	Minster	Redlands	Tilehurst		Victoria	West	
	At all Ages.	Under 1 year	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 years and upwards.														
Smallpox	—	34	392	783	23	9	3	—	31	199	97	56	49	150	114	106	52	192	57	141	—	*5
Measles	1244	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
German Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	109	1	26	61	11	9	1	8	2	16	1	8	6	13	4	4	5	27	9	18	3	†104
Scarlet Fever	280	1	3	7	2	10	14	—	1	14	4	—	—	2	4	4	2	3	8	—	—	—
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	2	—	—	—	19	18	2	—	8	74	18	25	21	24	16	11	10	28	9	36	—	†224
Cerebro-Spinal Meningitis	3	—	—	—	1	3	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—
Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Forms of Tuberculosis	108	—	—	17	26	50	12	3	5	16	8	6	—	15	11	8	1	9	11	12	—	§2
Ophthalmia Neonatorum	10	—	1	3	2	3	1	—	—	1	2	—	1	1	2	1	1	2	1	1	—	§2
Infantile Diarrhoea	15	15	—	—	—	—	—	—	—	1	3	1	1	1	2	1	1	2	3	1	—	§1
Influenzal Pneumonia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	†27
Acute Primary Pneumonia	2	2	10	8	4	6	6	2	—	—	1	3	—	3	1	7	2	5	—	1	—	†1
Trench Fever	38	—	—	—	—	1	—	—	—	7	1	—	—	—	—	—	—	—	—	—	—	—
Malaria	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica	10	—	—	—	4	5	1	—	—	2	1	—	—	—	1	2	—	21	1	1	—	§1
Dysentery	2	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—
	6	—	—	—	1	4	1	—	—	—	—	—	—	—	1	—	—	—	—	2	—	—
Totals	1876	54	477	1075	93	121	42	14	48	331	136	101	84	210	155	140	75	272	100	224	—	380

* Admitted to Bridge Street Isolation Hospital.

* Admitted to Bridge Street Isolation Hospital.

†Admitted to Park Isolation Hospital.

§ Admitted to Royal Berkshire Hospital.

Scarlet Fever. 280 cases of scarlet fever were notified, compared with 195 last year, and an average of 100 cases per annum since the extension of the borough. This excessive prevalence throughout the year has been common to the whole country, and especially in London. 224 of the cases were removed to the Park Hospital. It is very gratifying to record that not one single case proved fatal.

Return Cases. In nine cases, *i.e.*, 4.1 per cent, the discharge of a patient from the hospital was followed by the infection of another member of the family. The average period of residence of the presumed infecting cases was 6 weeks. In two cases the apparent cause of the infection was a nasal discharge, and in one a ear discharge, developed in each case after the child left the hospital. In the remainder no apparent cause was found. Numerous inquiries have been made in regard to such cases which are common to all hospitals. The consensus of opinion is that discharges chiefly from the nose are the most prolific cause, and that desquamation has no influence whatever. In the present state of our knowledge it appears likely that these cases will continue to occur.

Diphtheria. Notification were received of 109 cases of diphtheria, of which 104 were admitted to the Park Hospital. 119 cases were notified last year, but the average number of notifications since 1911 has been 64. Eight of the cases proved fatal. All cases are verified bacteriologically, the examination being made by the bacteriologist of the Royal Berkshire Hospital. A large number of contacts were swabbed, of whom a certain proportion were found to be diphtheria carriers." One "carrier," who was a milk seller was precluded from his employment until free from infection, compensation being paid. Positive cases were excluded from school. A few of the "carrier" cases were admitted to Park Hospital, where treatment can be more efficiently performed. The remainder were kept under supervision at home and swabs taken at intervals until a negative report was received.

The Corporation provides anti-toxin free to medical practitioners in the borough for those of their patients who are unable to pay for it. These facilities are used to the full. The danger rests in the fact that parents do not seek medical assistance soon enough. It cannot be too strongly urged that the danger of the disease increases with every day that the administration of anti-toxin is delayed.

Measles. By the Reading Corporation Act of 1881, first cases of measles are notifiable to the Medical Officer of Health. During the year, 1244 notifications were received. The average annual number of notifications since the extension of the borough in 1911 has been 672. Fortunately the disease was of a mild type for only eleven of the large number of cases, notified and unnotified, proved fatal. It is nevertheless only too common to underestimate the importance of measles. Even in the present year, when both scarlet fever and diphtheria were duly prevalent, measles caused more deaths than these two diseases together. It should also be emphasised that the younger the child the more likely is this disease to prove

fatal. Nine of the eleven fatal cases were children under two years. Every endeavour should therefore be made to protect the younger children and so postpone the attack to the later years when there is much less likelihood of a fatal termination. Measles and the enfeeblement which frequently follows it is often the forerunner of tuberculosis.

The lady Health Visitors visit all notified cases of measles to advise the parents. Five cases whose home circumstances were particularly unfavourable were nursed at Bridge Street Hospital. All recovered.

German measles is not now notifiable.

Enteric Fever. Notification was received of two cases of enteric fever during the year. Both were admitted to the Royal Berkshire Hospital. One was a resident of London and contracted the disease elsewhere. The second patient, after observation at the hospital, was found not to be suffering from the disease.

Encephalitis Legarthica. Three notifications in all of encephalitis lethargica were received. One patient, a boy aged 15, was found, after admission to the Park Hospital, to be suffering from tuberculous meningitis, the tubercle bacillus being found in the cerebro-spinal fluid. The notification was subsequently cancelled.

The second patient, a woman aged 48, was admitted to a private nursing home, where she died after $2\frac{1}{2}$ months illness. The third, a woman 68 years of age, died at home on the day the notification was received.

Acute Poliomyelitis. One notification was received in the case of a girl aged 8. The patient was admitted to the Royal Berkshire Hospital, where she died the following day. The certified cause of death was "*Cerebral hæmorrhage. Accidental concussion.*"

No notifications were received of cerebro-spinal meningitis.

Public Health (Pneumonia, Malaria, Dysentery, etc.) Regulations, 1919. One case of trench fever, 10 of malaria and 6 of dysentery, were notified during the year. In each case the patient was an ex-soldier, and the attack was a recurrence of the disease contracted while serving in the army. No instance of any of these diseases contracted locally has occurred.

Thirty-eight cases of acute primary pneumonia, and two of influenzal pneumonia were notified. The influenza epidemic had practically exhausted itself during the previous year, and there was no serious recurrence. Twenty two deaths were attributed to influenza, compared with 83 in 1919, and 228 in 1918. Pneumonia, which caused 57 deaths in 1920, continues to be amongst the most fatal diseases.

Improved nursing facilities, either at home or in hospital, will probably do much to reduce this source of mortality.

Puerperal fever and ophthalmia neonatorum are considered in the section on Maternity and Child Welfare.

Small-Pox. No cases were notified during the year. Only one case has occurred in Reading since 1902. No vaccinations were performed by the Medical Officer of Health under the Public Health (Small-Pox Prevention) Regulations, 1917.

VACCINATION.

Particulars relating to the vaccination of children whose births were registered during the 12 months ended 31st December, 1919, are shewn in the following Table, from information supplied by the Clerk to the Board of Guardians (Mr. W. H. Oliver) in his "Supplemental Return for 1919."

Districts.	Number of births Registered.	Number of children successfully vaccinated.	Insusceptible of vaccination.	Had Small Pox.	Died un-vaccinated.	Exemption from vaccination by Statutory Declaration of "Conscientious Objection."	Postponement by Medical Certificate.	Removed to other districts.	Removed to places unknown.	Number of births remaining (unaccounted for).	No. of Children not finally accounted for (including "exemptions" and cases postponed)	
											No.	Rate % of births.
No. 1	663	104	1	—	41	365	12	8	54	78	517	77.98
No. 2	507	102	1	—	27	293	4	10	40	30	377	74.36
No. 3	419	59	—	—	16	251	1	4	41	47	344	82.10
Whole Borough	1589	265	2	—	84	909	17	22	135	155	1238	77.91

Of the 1589 children whose births were registered in the whole Borough during the year 1919, 265, or only 16.68% were known to have been successfully vaccinated; while 84, or 5.29% died before they had been vaccinated.

Including those for whom a statutory declaration of conscientious objection was made, 1238 children, or 77.9% of those born were not reported to have been successfully vaccinated.

Rabies. During the latter months of the year rabies appeared amongst the dogs of the district. In all eight cases in animals were verified after examination of the heads by the officers of the Board of Agriculture. Muzzling and limitation of movements of animals were enforced by the police under orders issued by the Board. Ten persons were bitten or so exposed to infection as to render communication of the disease likely. Arrangements were made by the Health Department for the treatment of these persons at St. Thomas's Hospital, and no case of the disease developed in the human subject. When necessary, travelling expenses were paid to those whose circumstances made them unable to afford the outlay.

PARK HOSPITAL.

The following Table shews the number of patients treated at Park Hospital during the year :—

Disease.	Remaining 1 Jan., 1920.	Admitted.	Discharged.	Died.	Remaining 31 Dec. 1920
Scarlet Fever	27	224	219	0	32
Diphtheria	9	104	93	7	13
Tuberculosis	—	27	11	4	12
Other Diseases	1	9	8	2	0
Total	37	364	331	13	57

Owing to the excessive prevalence of both scarlet fever and diphtheria the numbers of cases admitted to hospital were considerably in excess of those in any year since the hospital was opened.

Dr. Rowland required to perform tracheotomy on seven cases of diphtheria, of which four recovered. The fatal cases were admitted in a late stage of the disease, death occurring in one on the day of admission, one on the day following and the third on the second day after admission.

Eight contacts were admitted to hospital for more efficient treatment than could be obtained at home, and all were discharged free from infection. Eighty-eight per cent of all diphtheria cases notified were admitted to hospital.

Eighty per cent of the notified cases of scarlet fever were admitted to hospital, all of whom recovered.

Five patients admitted for other diseases were incubating measles and developed the latter disease after admission, but no secondary cases occurred.

The other diseases treated include one of glanders, four of tonsillitis, one german measles, one cerebro-spinal meningitis, and two tuberculous meningitis. The two last proved fatal.

The tuberculosis cases are referred to in another section of the report.

Disinfection. Until the beginning of October of this year, the disinfection work of the Borough had been carried out by Mr. Street, who then retired from business. Since October the work has been performed at the hospital. Including the disinfection for Dellwood, 173 beds or mattresses and 1402 miscellaneous articles were disinfected in the last quarter. No figures are available of the work done in the earlier part of the year.

The disinfection is done by steam in a Barford & Perkins disinfector, the infected articles being conveyed to and from the hospital in a Ford van.

TUBERCULOSIS.

The number of deaths certified to be due to tuberculosis during the year was 91, of which 75 were pulmonary cases. This latter number includes 7 inward transfers. The fatal cases represent a death rate from pulmonary tuberculosis of .79 and from non-pulmonary of .17 per 1000 of the population. As will be seen from the table on page 9, which shews the returns of previous years, this is the lowest rate recorded.

The following table shews the new cases notified during the year, with the age and sex incidence :—

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications received during the year 1920.

Age Periods.	Number of Notifications on Form A.											No. of Notifications on Form B.		No. of Notifications on Form C.		
	Primary Notifications.											Total Notifications <i>i.e.</i> , including cases previously notified by other doctors	Total Notifications <i>i.e.</i> , including cases previously notified by other doctors	Poor Law Institu- tions.	Sanatoria	
	Total															
	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and up- wards	Total					
Pulmonary (males)	—	4	6	3	11	14	11	6	2	3	60	1	—	1	5	49
Pulmonary (females)	—	2	3	5	6	14	11	2	2	—	45	—	1	1	4	12
Non-Pulmonary (males)	—	1	1	—	1	1	1	—	—	—	5	—	—	—	—	—
Non-Pulmonary (females)	1	1	2	—	1	—	—	—	—	—	5	—	—	—	—	—

N.B.—In cases where patients have been notified as suffering from both pulmonary and non-pulmonary tuberculosis, the notifications has been included under the heading “ Pulmonary ” only.

The following further summary of notifications shews that the incidence of new cases has steadily fallen since the disease first became notifiable in 1912. The year 1920 gives the smallest number of new cases notified since that year :—

Year.	No. of cases notified.	
	Pulmonary.	Other.
1913	245	82
1914	218	33
1915	230	27
1916	157	31
1917	*174	23
1918	*167	18
1919	*123	13
1920	108	10

*Military cases included.

When one investigates the date of notification relative to the date of death of cases of tuberculosis, it is clear that information is received too late for steps to be taken either to help the patient or to prevent infection of those around him. In a very considerable proportion of cases the Registrar's death returns give the first intimation, while many others are notified a few weeks before the fatal termination of the disease, though the average duration of fatal cases has been estimated at four years.

The character of the disease itself undoubtedly explains the apparent delay in many cases. Unlike other infectious diseases there is, as a rule, no abrupt intimation of its commencement, and patients are often in an advanced stage before they seek assistance. It is also clear, however, that practitioners do not always observe the requirements of the Tuberculosis Regulations. A circular has recently been issued inviting their co-operation in this matter.

The measures in operation in the borough for combating tuberculosis comprise a dispensary, the provision of sanatorium treatment, a pavilion for advanced cases amongst men, the provision of shelters and supervision by visiting nurses at home, and the Council's Whitley Special School for tuberculous and pre-tuberculous children. There is also a voluntary after-care association.

The majority of the adult patients have been sent to the Grosvenor Sanatorium, Ashford, Kent, but a few female patients were sent in the early part of the year to Woodhurst Sanatorium, Dorking. Children have been sent to the Oakbank Open-Air School, Sevenoaks, and to the Church Army

Sanatorium at Fleet, Hants. No beds have been definitely retained by the Council in these institutions, but except in the case of boys from 8 to 16 years, no difficulty has been encountered in procuring accommodation, and little delay occurs in admission.

The Council has been in negotiation with the Governors of the Radcliffe Infirmary, Oxford, in regard to the sanatorium extension of that institution at Headington. Unfortunately, financial difficulties have caused great delay in the progress of the extension, but the work is now in progress. When complete, all Reading cases, pulmonary and non-pulmonary, will be treated there. Arrangements have been made this year for the admission of some non-pulmonary cases to the Headington Orthopædic Hospital, which is already open.

Dr. H. R. Minkley was appointed Tuberculosis Officer and adviser to the Insurance Committee in April 1920. He had previously carried out the work of the dispensary for a period of about three years. I am greatly indebted to Dr. Minkley for the following report on the work of the dispensary, and for the survey of tuberculosis work during the year.

Dispensary. 260 new cases were examined and the attendances at the dispensary totalled 2885 during the year. Of the new cases, 147 were males and 113 females, of whom 61 males and 29 females respectively, were diagnosed definitely as suffering from tuberculosis. The remaining cases were kept under observation, and the nurses arranged for their re-attendance at the dispensary until it was assured that no active disease was present.

The cases examined include 62 new contacts, for whose attendance the nurses likewise arrange during the course of their inquiries.

Dr. Minkley completed a survey of all pulmonary cases which were under care at the dispensary at the end of the year, with the following result—

PULMONARY TUBERCULOSIS, DECEMBER, 1920.

	With definite clinical signs.	With positive sputum.
Males ...	147	83
Females ...	144	45
Totals ...	291	128

This has regard to all known cases of the disease, and represents an incidence of one definite case to every 326 persons in the general population.

Home Supervision. A second tuberculosis nurse was appointed in

September. During the year 2611 visits were paid to the homes of patients, including 332 visits to discharged ex-service men.

The Council have 33 shelters available for the use of patients, all of which were in use during some part of the year. Thirteen were in use at the beginning and 23 at the end of the year.

The low lying position of certain parts of the town near the river renders home treatment by shelters in these localities more difficult and less promising, especially in the winter months.

On the occasion of death or removal, or if other circumstances indicate the necessity, disinfection is carried out and steps are also taken to procure correction of any structural or other sanitary defects in the homes.

Co-operation with other Services. The co-operation of medical practitioners in the district has been generally obtained. The Tuberculosis Officer furnishes clinical and bacteriological reports on cases referred for examination, and in his capacity of adviser to the Insurance Committee receives their reports on insured persons recommended for domiciliary treatment.

The School Medical Officers also refer suspected cases for examination. During the year the Tuberculosis Officer furnished reports on 24 children so referred, and gave recommendations as to their suitability for admission to the Whitley Special School.

Since the beginning of the present year the services of the School Dentist have become available for the treatment of tuberculous patients.

Special Methods of Treatment. Tuberculin injections have been continued in certain selected cases, a determining factor being comparative freedom from secondary infection as evidenced by the relative absence from the sputum of organisms other than the tubercle bacillus. The following analysis shews the present condition of patients so treated between the years 1915 and 1918 :—

CASES TREATED WITH TUBERCULIN.

Type of case.	Number.	Tubercle present.	Bacillus absent.	Present condition.
Pulmonary	10	6	4	All living. Two unfit for work.
Pulmonary and Laryngeal	2	2	0	1 well. 1 dead.
Other forms	6	—	—	All at work.

A few cases of broken down glands were treated with mixed infection serum during 1917-18. Healing took place in all, and no recurrence has taken place so far as is known.

Sanatorium Treatment. The subjoined table shews the number of patients treated during the year and the condition at the end of the year :—

	Remaining Sanatorium, December 1919		Admitted during the year.		Totals.	
	Males.	Females.	Males.	Females.	Males.	Females.
Adults	9	5	29	18	38	23
Children	0	3	1	5	1	8
Totals	9	8	30	23	39	31

Condition at the end of the year :—

Improvement maintained	39
Disease progressive	14
Died	6
Remaining in Sanatorium	11
Total	70

Tuberculosis Pavilion. A description of the pavilion will be found at page 42. In the main the pavilion is reserved for advanced cases, but a certain number of observational cases have been admitted. Of 27 men admitted since the opening in July, nine were discharged improved. Two of these patients were able to proceed to a sanatorium, and one to a course of concurrent treatment and training. Two were discharged without material change in their condition, and four died. Twelve patients remained at the end of the year.

Ancillary Treatment and Nursing. The Insurance Committee provided a sum of £60 for the supply of milk for insured tuberculous persons, whilst the Corporation set aside a like sum for the non-insured.

Cod liver oil, etc., was also supplied on the recommendation of the Tuberculosis Officer. No provision has been made by the Council for domiciliary nursing, but the Queen Victoria Nursing Institute kindly undertook the care of cases referred to them, a service which is very greatly appreciated.

Non-Pulmonary Tuberculosis. A special orthopædic department is in operation at the Royal Berkshire Hospital, where the majority of cases of joint tuberculosis receive preliminary treatment, affixing splints, plaster, etc. The work of the hospital is supplemented by home supervision and provision of extra nourishment where necessary through the dispensary. As stated above arrangements have now been made for the admission of certain cases to the Headington Orthopædic Hospital. When that scheme is complete more beds will be available.

Care and After-Care. The Reading Tuberculosis Dispensary Care Association, inaugurated in 1915, continues to perform a most valuable

function. Constituted on a voluntary basis it has representatives from the various public and charitable bodies. The Tuberculosis Officer recommends cases for the consideration of the Association, priority being given to patients awaiting admission to or recently discharged from sanatoria, and to patients under treatment at home whose prognosis is good. The Association, however, also provides assistance in certain chronic cases where the grant is directed rather to the comfort of the sufferer than with a hope of altering the prognosis. During the year 97 cases came under the consideration of the Association, of whom 89 received assistance in various ways, for example, domestic assistance, grants for dentures, provision of suitable footgear, and the maintenance of children during their parents' stay in sanatoria.

A most valuable work of the Association is the arranging for the boarding out of pre-tuberculous children at seaside or country homes. During the year 16 were so treated. Eleven returned considerably improved, 2 remained a short time only, the remaining three being still away at the end of the year. Work of this description can hardly fail to be of the greatest value.

Occupation and Tuberculosis. Dr. Minkley, believes that occupation plays a relatively unimportant part in the incidence of tuberculosis in Reading. He considers, however, that the employment of large numbers of girls and young women in factories and workshops where dusty conditions prevail (*e.g.*, particles of flour, or dust from cloth) may have a predisposing effect in certain cases when the protective vitality of such persons is reduced by anaemia, the onset of menstruation, etc.

Similar conditions appear to favour the production of a fibroid type of the disease in men at or past middle life where nutrition is lowered as during the war period, or when faulty assimilation of food and concurrent toxæmia arising from carious teeth produce a similar lack of resistance.

The difficulty of obtaining suitable employment for tuberculous persons has been at least as great as in previous years. The Insurance Committee, by providing concurrent treatment-training for certain ex-service men has helped to re-educate them in more suitable occupations.

The Tuberculosis Officer has also written to the local Employment Exchange indicating which avenues of employment would be most suitable to patients registering there.

The Parks and Pleasure Grounds Committee of the Council have given instruction that patients recommended by the Tuberculosis Officer should be afforded opportunity of employment when possible.

VENEREAL DISEASE.

An agreement was entered into in 1917 between the Corporation of Reading and the County Councils of Berkshire, Wiltshire and Southampton on the one hand, and the Royal Berkshire Hospital on the other, whereby the hospital undertakes the diagnosis and treatment of venereal diseases

on behalf of the authorities named. Southampton has since withdrawn from the agreement. Special clinics are held at the hospital, for men at 2 p.m. on Wednesdays and 5 p.m. on Saturdays, and for women at 5 p.m. on Wednesdays and 3 p.m. on Saturdays. These hours are found to suit the convenience of patients. In addition to the fixed hours of the clinics, facilities are available at all reasonable hours for the irrigation of cases of gonorrhoea, this work being carried out by trained nurses in the case of women and by a specially trained orderly for men. The clinics are conducted as regards the confidential character of the consultations and in matters of general administration in conformity with the requirements of the Ministry of Health.

No facilities have been provided by the Council for preventive disinfection of persons exposed to infection.

The original agreement contemplated the provision of four beds for in-patient treatment. It has since been found necessary to increase this number to twelve beds, which have been in almost constant occupation throughout the year.

These arrangements appear to meet all necessary requirements in the district, the numbers of patients and attendances increasing each year since the opening of the clinic.

The above-mentioned agreement with the Hospital provides for the supply of salvarsan substitutes to approved medical practitioners, and for the pathological examination of specimens submitted. The facilities so offered have not been taken advantage of to any great extent, the practice rather being to refer patients to the clinic.

The following tabular statement by the Medical Officer in charge of the clinic will shew the work performed during the year.

VENEREAL DISEASES.

Return for the year ended 31st December, 1920.

ROYAL BERKSHIRE HOSPITAL.

A. Total number of persons dealt with during the year at or in connection with the out-patient clinic :—

	Column 1.	Column 2.	Column 3.
	Number of persons who were under treatment or observation on Jan. 1st., 1920.	Number of persons dealt with during the year for the first time.	Total.
(a) Syphilis	201	281	482
(b) Soft Chancre	—	4	4
(c) Gonorrhoea	141	206	347
(d) Conditions other than venereal	12	5	17
Total	354	496	850

B. Total attendances of all patients during the year at the out-patient clinic :—

13784

C. Aggregate number of "In-patient days" of treatment during the year :—

3532

Date—*20th January, 1921.* (Signed) G. STEWART ABRAM, M.B.,
Medical Officer of the Treatment Centre.

MATERNITY AND CHILD WELFARE.

Infant Mortality. There were 152 deaths of children under one year during 1920. Of this number, four were children of Reading parents who died elsewhere, and six deaths of infants of parents not normally resident in Reading are excluded.

This represents an infant mortality rate of 66.7 per 1000 registered births. There is no more striking reflex of recent public health progress than the continued fall in the rate of infant mortality. The rate of 66.7 in 1920 compares with one of 68.4 in the previous year, and with an average rate of 83.3 during the preceeding 10 years. From the earlier years of our records one finds that the normal rates obtaining from 1874 down to the beginning of the present century in Reading were anything from 130 upwards. In 1878 and in 1880 the figure almost reached 170. The past fifteen years has seen a notable fall which has at no time been more marked than during the last three years when interest and education in matters of infant welfare have come so much into prominence.

Again to indicate more clearly the meaning of these rates, if the rate for the 10 years ending 1900 had been maintained during 1920, instead of 152 children, 310 would have died before attaining their first birthday, a saving of 158 infant lives.

The following table will shew the causes of the infant deaths registered with the age distribution in weeks and months, and the municipal wards in which they occurred.

INFANT MORTALITY, 1920. (CAUSES OF DEATH under one year).

Causes of Death.				Under 1 week	1—2 weeks.	2—3 weeks	3—4 weeks	Total under 1 month.	1 month and under 3 mos.	3 months and under 6 mos.	6 months and under 9 mos.
All Causes	Certified	...	...	49	15	11	5	80	28	12	13
	Uncertified	...	...	5	2	—	—	7	1	—	—
Small Pox	...	...	...	—	—	—	—	—	—	—	—
Chicken Pox	...	...	...	—	—	—	—	—	—	—	—
Measles	...	...	...	—	—	—	—	—	—	—	—
Scarlet Fever	...	...	...	—	—	—	—	—	—	—	—
Whooping Cough	...	...	...	—	—	—	—	—	1	—	—
Diphtheria and Croup	...	...	...	—	—	—	—	—	—	—	—
Erysipelas	...	...	...	—	—	—	—	—	—	—	—
Tuberculous Meningitis	...	...	...	—	—	—	—	—	—	—	—
Abdominal Tuberculosis	...	...	...	—	—	—	—	—	—	—	—
Other Tuberculous Diseases	...	...	...	—	—	—	—	—	—	—	1
Meningitis (not Tuberculous)	...	...	...	—	—	—	—	—	—	1	2
Convulsions	...	...	...	1	1	—	—	2	1	1	—
Laryngitis	...	...	...	—	—	—	—	—	—	—	—
Bronchitis	...	...	...	—	—	—	—	—	2	2	—
Pneumonia	...	...	...	—	1	—	2	3	3	5	4
Diarrhoea	...	...	...	—	1	—	—	1	2	1	—
Enteritis	...	...	...	—	1	—	1	2	4	—	2
Gastritis	...	...	...	—	—	—	—	—	—	—	—
Syphilis	...	...	...	—	1	—	—	1	—	—	—
Rickets	...	...	...	—	—	—	—	—	—	—	—
Suffocation (overlaying)	...	...	...	—	—	—	—	—	—	—	—
Injury at birth	...	...	...	3	—	—	—	3	—	—	—
Atalectasis	...	...	...	3	—	—	—	3	—	—	—
Congenital malformation	...	...	...	5	1	2	1	9	—	—	1
Premature birth	...	...	...	38	6	4	1	49	2	—	—
Atrophy, Debility, Marasmus	...	...	...	2	3	4	—	9	6	2	—
Other Causes	...	...	...	2	2	1	—	5	8	—	3
Totals	...	...	...	54	17	11	5	87	29	12	13

9 months and under 12 mos.	ALLOCATED TO MUNICIPAL WARDS.													DEATHS IN INSTITUTIONS.	
	Total under 1 year.	Abbey.	Battle.	Castle.	Caversham.	Church.	East.	Katesgrove.	Minster.	Redlands.	Tilehurst.	Victoria.	West.	Residents of Borough.	Non-Resi- dents of Borough.
11	144	4	23	10	5	14	16	26	6	3	11	10	16	—	—
—	8	—	1	1	—	1	—	—	—	—	2	3	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	3	—	—	—	1	—	1	—	1	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	1	—	—	—	—	—	—	—	—	—	—	1	—
—	3	—	—	—	—	—	1	1	1	—	—	—	—	—	1
—	4	—	1	—	—	—	—	1	—	—	—	1	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	5	—	1	—	1	—	—	1	—	—	1	—	1	—	—
3	18	—	4	2	1	—	—	9	—	—	—	1	1	1	—
1	5	—	1	—	—	1	1	—	—	—	1	—	1	—	—
1	9	1	—	3	—	2	—	1	—	—	—	—	2	—	1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	3	1	—	1	—	—	—	—	—	—	—	—	1	—	1
—	3	—	2	—	—	—	1	—	—	—	—	—	—	—	—
—	10	1	4	—	—	1	2	—	1	—	1	—	—	—	—
—	51	1	4	2	2	4	7	8	2	2	7	6	6	1	—
—	17	—	4	2	—	3	1	2	—	—	2	1	2	—	1
2	18	—	1	1	—	4	2	3	1	1	1	3	1	3	2
11	152	4	24	11	5	15	16	26	6	3	13	13	16	6	6

An analysis of the Table will shew that 87 or 57% of the deaths occurred before the children were a month old.

It will also be seen that over 80 of the deaths were assigned to causes like prematurity, congenital malformation, and debility, etc., which have their origin prior to the birth of the child. It is obvious that any measures taken to reduce this, which is now the principal cause of infant mortality, must be directed to improve the health of the mother. These measures in addition to saving child life, will do much to prevent a great deal of quite needless suffering on the part of the mother.

Still-Births. Notification was received of 75 still-births or at the rate of 3 per cent of live births. The Health Visitors made inquiry into the majority of the cases. The principal causes so far as could be ascertained, were prematurity, often with the history of definite ill-health of the mother, and difficulties in labour from malpresentations or otherwise.

The scheme of Maternity and Child Welfare work in the district comprises the following :—

Supervision of Midwives. The number of midwives who gave notice of their intention to practice during the year was 30, of whom 8 did not practice regularly. Six are employed in institutions, and the remainder are engaged on the district. The Inspector of Midwives paid 63 visits to practising midwives and found the condition of their equipment and the method of carrying on their work generally satisfactory. It is perhaps unfortunate that the distribution of work amongst midwives is so uneven. It is found that certain popular midwives are engaged for and attend more cases than appears desirable if the necessary individual attention is to be given to each patient, though no untoward result has been found to follow.

Records of Sending for Medical Help. Intimation was received of 218 cases in which midwives required to send for medical help. The following summary gives the reasons for which the assistance was required :—

Assistance required on account of the mother, 153.

Assistance required on account of the infant, 65.

The local Authority paid £31 in fees to doctors called in by midwives under the Midwives Act, 1918, and £24 to midwives, in cases where the patients themselves were unable to pay the fees. The Corporation has also made a grant of £20 to the Caversham District Nursing Association in aid of their midwifery service.

Notification of Births Act, 1907. By this Act an obligation is placed on the father, and any person in attendance on the mother, to notify a birth to the Medical Officer of Health within 36 hours of its occurrence. In accordance with the terms of that Act, 2126 notifications or 93 per cent of the total births registered were received. This number was notified as follows, 573 by doctors, 1527 by midwives, and 26 by parents.

Health Visiting. Except when circumstances point to the likelihood of all necessary help and advice being otherwise obtained, all homes are visited as soon as possible after the receipt of a notification of a birth.

Regular visits are also made during the first year of life, and less frequently to children under five years.

Special attention is given to children whose home circumstances or want of progress indicate that the help and advice which Health Visitors are able to give will be useful to the parents. The following summary shews the work done during the year :—

First visits after receipt of notifications	...	...	2084
Revisits to children under 1 year	...	...	5695
Visits to children aged 1—5 years	...	...	4775
Special visits	...	...	1030
Visits to expectant mothers	...	...	522
Special visits to cases of measles	...	...	1271
Special visits to cases of ophthalmia	...	...	30
Special visits in regard to still-births	...	...	46
Special visits in regard to infants deaths	...	...	95

Infant Welfare Centres. It cannot be too clearly emphasised that the object of these Centres is not the cure of sick babies. The principle object is by timely advice to prevent much of disease and mortality that we know to be preventible. The consideration of infant mortality statistics above will indicate that much has been done to achieve this object.

There are now four Infant Welfare Centres in operation and they are so distributed that all quarters of the Borough can now be said to be adequately served in this respect. Dr. Sidney Gilford attended all centres until October.

The appointment of Dr. Agnes Bernfeld has enabled us to relieve Dr. Gilford of this excessive amount of work and the Caversham Centre and the Friday consultations at Star Lane are now attended by her. Two consultations are now held weekly at the chief Centre in Star Lane, one on Wednesday and one on Friday, and one session weekly at each of the remaining Centres. The number of babies attending and the average attendance at each is as follows :—

INFANT CONSULTATIONS.

	Number attending.	Re-attendances.	Average attendance.
Star Lane, Wednesday	279	3146	68
Star Lane, Friday	170	1806	39
Elm Park Hall, Oxford Road	207	1973	44
Park Institute, Wokingham Road	171	2457	53
Caversham, Weston Mead	176	1637	33
Totals	1003	11019	237

Ante-Natal Work. An Ante-natal clinic under the care of Dr. Bernfeld was started in October, and ten sessions were held before the close of the year. Fifty-three new patients attended, the average attendance being ten. The majority of the patients have been afterwards confined at Dellwood, a report on their condition being furnished to the Home by the Medical Officer of the clinic. There are two matters to which I should like to draw attention in connection with ante-natal work. First, that there appears to be a considerable amount of unnecessary suffering in connection with child bearing. Many prospective mothers imagine that the maladies from which they often suffer are a necessary accompaniment of their condition, when by the application of often very simple remedies much of the inconvenience could be relieved.

The second point has already been emphasised above, namely, that future reductions in infant mortality can only take place by means of increased care and supervision of the mother during the period prior to the birth of her child.

Dellwood Maternity Home. This Home was opened in September, 1920. It was a large private dwelling standing in about two acres of land in Liebenrood Road. After the necessary adaptation, accommodation has been provided for twelve patients, with an additional separation ward with one bed. There is also accommodation for the matron and two staff nurses, all certified midwives, for two probationers, and for the domestic staff. All necessary equipment has been provided and the Home as adapted has proved eminently suited for the purpose. It is designed primarily for the reception of necessitous cases and for those whose home conditions are unsatisfactory. Persons in receipt of the maternity benefit are expected to pay the sum received, £2, for the two weeks residence, which is the normal period. Those who are unable to pay this sum are admitted at lower rates, or free, as their cases demand, whilst those in better circumstances are charged at higher rates. From the date of the opening, 16th September, until the end of the year, 26 cases were admitted, 23 of which were attended by the matron and her assistants, and 3 by the patient's own doctor. No maternal complications occurred, but two of the infants were still-born—one had been dead for some considerable time before delivery, and one a breech presentation died at birth.

Complicated Cases of Labour. Dellwood Maternity Home being designed for normal cases, an agreement has been entered into with the Royal Berkshire Hospital for the treatment of complicated cases of parturition, the Corporation paying a maintenance charge for all such cases. During the year eleven patients were admitted under this agreement for the reasons shewn:—three with albuminuria or eclampsia, two puerperal septicaemia, two hæmorrhage, and the remaining four various complications of pregnancy.

By the same agreement arrangements were made for the admission of children under five who require in-patient treatment, the number being limited to one quarter of the total number of beds available for children.

Day Nurseries. During the year two day nurseries, one at either end of the borough, under the management of voluntary agencies, have been open for the reception of children whose mothers are engaged at work during the day.

The Maternity and Child Welfare Committee granted a subsidy of £200 to each to assist in carrying on their work. The average attendance during the year at the Reading Health Society's house in Castle Street was 17, and at the East Reading Day Nursery in King's Road, 10. Since the beginning of the present year, the Castle Street nursery has been closed, the premises being required for business purposes. The promoters felt that since the termination of the war and more especially since the recent depression in trade, fewer women are engaged away from home, and the need for these institutions is much less felt. This is clearly evidenced by the fall in the daily attendance at both nurseries since the beginning of the present year.

The East Reading Nursery has also made provision for 11 resident babies. The conditions of admission are where, by reason of illness or death, the children are deprived of their mother's care. Illegitimate children are also admitted. A small charge per week is made for maintenance.

Puerperal Fever. Five notifications were received of this disease, of which two were cases occurring outside the borough, but were removed to the Royal Berkshire Hospital for treatment. Of the three cases occurring in the borough, two were treated at the hospital and one at home. All three died. An inward transfer, the case of a Reading woman who died of puerperal fever in a London hospital, was also received.

From Table II, pages 10 and 11, it will be seen that, excluding the inward transfer mentioned, and a case in which influenza was the immediate cause of death, but including puerperal fever, there were nine deaths from accidents or diseases of parturition. This is a maternal mortality of 3.9 per 1000, or one in every 256 births occurring in Reading.

Ophthalmia Neonatorum. Fifteen notifications were received of ophthalmia neonatorum. All were visited by the lady Health Visitors. In ten of these cases, of which six were treated at the Royal Berkshire Hospital, the infant made a good recovery. In two, the infant died from other causes. In two others, the sight of one eye was permanently affected, and in the remaining case the sight of one eye was completely lost.

Milk (Mother and Children) Order, 1919. The Corporation formulated a scheme for the supply of milk, dried milk, and certain foods suitable for expectant and nursing mothers and children under five. The outline of the arrangement is that a fixed scale of means was decided and no person in receipt of an income above the scale was given milk either free or below cost. Persons whose income was below the scale were given milk free or at such a rate below cost price as their circumstances warranted. Each case was considered by a sub-committee which met once a week. Owing to the extreme trade depression and the consequent great increase in the number of persons

whose income was below the scale, the amounts distributed were much in excess of the previous year.

The cost for the financial year ending March 31st, 1921, was £2,500, which, after deduction of the Exchequer grant at the rate of 50 per cent, represents a nett cost to the borough of approximately £1,250.

At the latter end of the year a certain number of meals were provided for expectant and nursing mothers through the agency of the Education Committee who had a complete organisation for the supply of meals to school children.

SANITARY ADMINISTRATION.

(1) **Staff.** The staff of the Health Department is set out on page 5.

The Medical Officer of Health is the chief administrative officer and is also School Medical Officer. Dr. Bernfeld, in addition to attending the ante-natal clinic and two infant consultations, is Assistant School Medical Officer, so that all branches of the work are closely correlated. Dr. Gilford and Dr. Rowland devote only part of their time to the work of the Council, the former taking three sessions weekly at the infant consultations, and the latter being visiting Medical Officer to the Park Hospital.

The chief Inspector of Nuisances is also Meat Inspector and Inspector of Canal Boats. Each of the assistant Inspectors of Nuisances has been allotted an area and is responsible for all duties in that area, including inspection under the Housing Acts, the Public Health Acts, and the visiting of all cases of infectious disease.

The five lady Health Visitors have similarly been allotted areas in which they carry out routine health visiting, visitation of notified cases of measles, ophthalmia, etc. The senior lady Health Visitor is also inspector of midwives and an Inspector under the Factories Acts.

Two nurses devote their time to the home visitation of cases of tuberculosis and the work of the dispensary. The work of each of the officers is more clearly indicated in the appropriate section of the report.

(2) **Hospital Accommodation.** The Park Hospital for infectious diseases is situated on the western outskirts of the Borough, and has accommodation for 45 patients. The scarlet fever pavilion has 31 beds, the diphtheria pavilion 10 beds, and there is an isolation block with 4 beds. Each ward has sideroom accommodation for the treatment of special cases. There is also a discharge block and the necessary accommodation for staff. All these buildings are brick, of modern construction, and equipped with all necessary requisites.

In July, 1920, a new pavilion of 12 beds was opened for advanced cases of tuberculosis in men. This is of wood, asbestos lined, with a similar structure for the nursing staff. It has been found very suitable for its purpose.

The number of beds provided is hardly sufficient for the needs of the population especially in epidemic times, and there is at present no accommodation for advanced cases of tuberculosis in women.

The Medical Officer of Health is Medical Superintendent of the hospital, the visiting medical officer in clinical charge of the patients being Dr. E. W. Rowland.

There are now two steam disinfectors in which the disinfection work of the hospital and of articles from infected houses in the town is carried out.

In addition to the Park Hospital there is an old hospital in the centre of the town with accommodation for about twelve patients. This is in many respects unsuitable for dealing with serious cases and can only be regarded as useful in emergency. During the year it was used for a few cases of measles and for the better treatment of a family suffering from scabies, the home circumstances in both instances being unfortunate.

Provision has been made on an isolated site at Lower Whitley for the reception of small pox patients. There are two wards with nine beds. Concreted sites with water and heating arrangements permit the rapid extension of the accommodation under canvas in case of emergency. Marquees are retained for this purpose.

(3) **Local Acts, Adoptive Acts, Byelaws, etc.**

(a) Local Acts. There are numerous local acts and orders dealing more or less with health matters. These date from 1826 onwards. The most important of these are the Reading Corporation Act, 1881, which provides *inter alia* for the notification of measles.

The Reading Corporation Act, 1914.

Section 51 requires food storage accommodation in new houses.

Section 68 empowers the Medical Officer to examine the inmates of common lodging houses during prevalence of dangerous infectious disease.

Section 67 gives power to require names of laundrymen to whom clothes, etc., from infected houses are sent.

Section 69 regulates removal of bodies of persons dead of infectious disease.

Section 70 empowers the Corporation to compensate persons requested to cease employment on account of infectious disease.

Section 71 regulates the manufacture and sale of ice cream.

Section 72 prohibits blowing or inflating of carcasses by mouth.

Section 73 prohibits the use as a sleeping room of any room in which food is sold or prepared for sale.

Section 74 gives power to require the cleansing of houses infested with vermin.

Section 75 empowers the Corporation to take measures for the cleansing of verminous persons.

(b) GENERAL ADOPTIVE ACTS.

Infectious Disease (Prevention) Act, 1890, except Sections 6, 15 and 19.

Public Health Acts (Amendment) Act, 1890, Part 3.

Public Health Acts (Amendment) Act, 1907, Sections 78, 80, 84, 85, 86, 87, 88, 89, 90, and 91.

(c) BYELAWS.

Common Lodging Houses	...	...	...	...	...	...	1886
Slaughter Houses	...	...	...	...	...	...	1886
Slaughter Houses provided by the Corporation	...	...	...	...	...	...	1886
Offensive Trades	...	...	...	...	...	...	1886
Prevention of Nuisances, etc.	...	...	...	...	...	...	1886
Public Baths	...	...	...	...	...	...	1903
New Streets and Buildings	...	...	...	...	...	...	1905
Sanitary Conveniences	...	...	...	...	...	...	1910
Good Rule and Government	...	...	...	...	...	...	1911
Means of Escape in case of Fire in certain Factories and Workshops	...	...	...	...	...	...	1913
New Buildings	...	...	...	...	...	...	1913
New Buildings	...	...	...	...	...	...	1919

(d) REGULATIONS.

Drainage	...	...	...	...	...	...	1896
Dairies, Cowsheds and Milkshops	...	...	...	...	...	...	1907

(4) **Arrangements for Bacteriological and Chemical Work.**

The bacteriological work of the borough was carried out by the bacteriologist of the Royal Berkshire Hospital.

Examination of Swabs for Diphtheria Bacillus.

Number examined	Found positive.	Negative.
438	141	297

These include swabs submitted from patients in the Park Hospital.

In two cases cerebro-spinal fluid was submitted for examination. The result was negative for meningococcus in both cases, but in one the tubercle bacillus was found.

The examination of sputa for tubercle bacillus was carried out at the dispensary. The number of specimens examined was 313, of which 72 were positive and 241 negative.

The chemical examinations were performed by Dr. Ashby, the Public Analyst. The results of his examinations are set out in the section on Food.

HOUSING.

I. **General Housing Conditions in the District :—**

- (1) GENERAL HOUSING CONDITIONS. There are approximately 21,000 houses in the borough, of which about 17,400 are working class dwelling houses.

(2) (a) **SHORTAGE OF HOUSES.** There is a very distinct shortage of houses, which was estimated in 1919 at 600. A recent survey reveals the fact that there are probably not less than 2,000 houses occupied by two families. In every large centre of population there is always a considerable number of people, who for economic or other reasons share houses. In Reading and Caversham at the last census there were 826 houses occupied by two separate occupiers, although there was at the same time a large number of empty houses. Even when allowance is made for this it will be seen from the above statement that the estimated deficiency of 600 houses does not overstate the present requirements without having regard to any houses required to replace insanitary property.

(b) The Council have adopted a scheme for the provision of 600 houses. Operations have been commenced on 162 of these on the Shinfield Road Estate. At the end of the year 50 were completed and occupied.

There were also 28 houses built by private enterprise, for 21 of which a subsidy was granted.

An unoccupied hotel, the property of the Corporation, was converted into five working class tenements, which came into occupation during the year.

(3) There have been no important changes in the population during the year, nor are any anticipated in the near future.

II. **Overcrowding.** There is a very considerable amount of overcrowding in the borough due to the great shortage of houses. While this shortage continues, it is impossible to deal seriously with the question of overcrowding. The only action which could be taken was for the officers of the department to use their good offices in helping to find alternative accommodation to relieve the worst cases.

III. **Fitness of Houses.**

(1) (a) **GENERAL STANDARD OF HOUSING.** The general standard of housing in the district is good. Where the actual structure of the houses often leaves much to be desired the situation is frequently relieved by the general lay-out scheme, most of the streets being wide, and the majority of the houses having gardens. There are, however, certain old courts in the older parts of the town which are quite unfit for habitation. These houses number about 70. Thirty-two of them are back-to-back, and nearly all the remainder having no through ventilation, are in effect back-to-back. All of these houses are very old and some are in a state bordering on collapse.

In the case of over 40 of these houses it is the expressed desire of the owner to demolish them, but action has been suspended on account of the lack of other accommodation.

(b) CHARACTER OF DEFECTS. The character of the defects found are general dilapidations and want of repair. Much of this has arisen through lack of attention during the war years, and it is also probable that in the overcrowded condition of many of the houses they have been subjected to rougher usage than would have been the case had they been occupied by one family.

(2) ACTION TAKEN AS REGARDS UNFIT HOUSES. The action taken has been principally under powers given by the Housing Acts, though in a certain number of cases defects have been remedied by notice under Section 91 of the Public Health Act, 1875. As will be seen from the statistical table, 3559 houses have been inspected either as the result of complaints received or in routine inspections under the Housing (Inspection of District) Regulation, 1910. Of the number inspected, 1412 were found not to be in all respects reasonably fit for habitation, of which 1332 were rendered fit as the result of informal notice. In 43 cases statutory notices under Section 28 of the Housing, etc., Act, 1919 were served and complied with. One statutory notice under Section 91 of the Public Health Act, 1875 was only complied with after proceedings in the police court.

Work under the Acts has been concentrated on houses reasonably capable of repair. In the case of the 70 houses referred to above, and the majority of those comprised in the unhealthy areas mentioned below, the houses are manifestly not worth the expenditure of any considerable sum of money, and only the barest necessities have been urged.

Representations were made for closing orders in respect of 14 houses. Of these houses, four were partially collapsed, and were untenanted. The remainder were in such a state as to threaten danger to the occupants. One of these houses collapsed before the date of expiry of the notice, and while the tenants were still in occupation.

Demolition orders were made in respect of nine houses which were closed in 1917, and which have not since been occupied. These houses have been demolished.

(3) Financial stringency and the cost of labour and materials have presented a real difficulty in procuring the repair of some houses. Since the removal of the more onerous terms of the Rent Restriction Act and the tendency to fall in costs, the situation tends to improve, and will doubtless improve further.

(4) The majority of the houses in the district have water laid on and are supplied with water closets. In the old houses to which reference has been made the water supply and water closets are situated outside the houses, there being as a rule one tap and one water closet to every three or four houses. In one court there is one water tap to 12 houses, and one water closet to 3 houses.

IV. **Unhealthy Areas.**

No official representations were made during the year under Part 1 or Part 2 of the Housing of the Working Classes Act, 1890. In the survey of the town prepared in October 1919, it was stated that there were 160 houses unfit for habitation and incapable of being made fit.

Most of these houses are comprised in two areas which it has been considered could more conveniently be dealt with by improvement schemes under the Act.

These areas were described in detail in a report submitted to the Housing Committee in August, 1920.

Area A, which it is proposed to represent under Part 2 of the Act, comprises 59 houses, housing 200 persons.

Area B, to be dealt with under Part 1 of the Act, comprises 211 houses, housing 900 persons.

The general characteristics of both areas are the same. The houses are in the main of old structure, dating back about 100 years. Many are back to back, or so designed as to render through ventilation impossible. Most of the houses are damp and in a dilapidated condition. No water is laid on inside any of the houses, there being as a rule one tap and one water closet to every three or four houses. In the knowledge that their day was past, very little money has been spent on these houses in recent years, and their condition is consequently deteriorating further.

It is recognised that these areas cannot be dealt with comprehensively until the acute housing shortage is relieved, but their present condition makes the matter one of some urgency.

V. **Bye-Laws.**

There are no bye-laws relating to houses let in lodgings or to tents, vans, sheds, etc., nor are any urgently required. A list of bye-laws relating to new houses will be found on page 44. These bye-laws work satisfactorily.

VI. **Staff.**

The staff engaged on housing duties are the Medical Officer of Health, the Inspector of Nuisances, and four Assistant Inspectors. The borough is divided into four areas, which have been assigned one to each Assistant Inspector. Routine inspections are carried out and the results carefully recorded.

APPENDICES.

HOUSING CONDITIONS.

STATISTICS, Year ended 31st December, 1920.

1. GENERAL.

(1)	Estimated population	...	...	...	...	...	...	95,387
(2)	General death-rate	...	...	...	...	...	...	10.7
(3)	Death-rate from tuberculosis (all forms)	...	...	...	...	...	...	.96
(4)	Infant mortality	...	...	...	...	...	...	66.7
(5)	Number of dwelling-houses of all classes	...	...	...	...	...	...	21,000
(6)	Number of working-class dwelling-houses	...	...	...	...	...	...	17,400
(7)	Number of new working-class houses erected	...	...	...	...	...	...	78

2. UNFIT DWELLING-HOUSES.

I. Inspection.

(1)	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	...	...	...	...	...	...	2055
(2)	Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910	...	...	...	...	...	...	1504
(3)	Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation (approximately)	...	...	...	...	...	...	200
(4)	Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	...	...	...	...	...	...	1412

II. Remedy of Defects Without Service of Formal Notices.

	Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	1332
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III. Action under Statutory Powers.

A. Proceedings under Section 28 of the Housing, Town Planning, etc., Act, 1919.

(1)	Number of dwelling-houses in respect of which notices were served requiring repairs	...	...	...	...	...	...	43
(2)	Number of dwelling-houses which were rendered fit—	...	...	...	...	...	...	43
	(a) by owners	...	...	...	...	...	...	—
	(b) by Local Authority in default of owners	...	...	...	...	...	...	—
(3)	Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	...	...	...	...	...	...	—

B. Proceedings under Public Health Acts.

(1)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	...	...	...	...	...	...	1
(2)	Number of dwelling-houses in which defects were remedied—	...	...	...	...	...	...	1
	(a) by owners	...	...	...	...	...	...	—
	(b) by Local Authority in default of owners	...	...	...	...	...	...	—

C. Proceedings under sections 17 and 18 of the Housing, Town Planning, etc., Acts, 1909.

(1)	Number of representations made with a view to the making of closing orders	...	...	...	...	...	...	14
(2)	Number of dwelling-houses in respect of which Closing Orders were made	...	...	...	...	...	...	14
(3)	Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	...	...	...	...	...	...	nil
(4)	Number of dwelling-houses in respect of which Demolition Orders were made	...	...	...	...	...	...	9
(5)	Number of dwelling-houses demolished in pursuance of Demolition Orders	...	...	...	...	...	...	9

3. UNHEALTHY AREAS.

	Areas represented to the Local Authority with a view to Improvement Schemes under (a) Part 1, or (b) Part 2, of the Act of 1890	nil
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(1)	Name of area
(2)	Acreage
(3)	Number of working-class houses in area
(4)	Number of working-class persons to be displaced

IV.	Number of houses not complying with the building bye-laws erected with consent of Local Authority under section 25 of the Housing, Town Planning, etc., Act, 1919	—
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V.	Staff engaged on housing work with, briefly, the duties of each officer	6
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